

Application No. 09/936,333

Amendment of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Canceled)

15. (Currently amended) ~~An A murine monoclonal antibody or immunogenic immunologically reactive~~ fragment thereof which recognizes and binds to ~~SEQ ID NO: 5 or a fragment thereof or SEQ ID NO: 27 or a fragment thereof~~ a protein complex comprising a two-chain form of matriptase, wherein said antibody is selected from the group consisting of M32, M69, and M19.

16. (Currently amended) An isolated antibody or ~~immunogenic immunologically reactive~~ fragment ~~thereof~~ which selectively binds with greater affinity to the single-chain (zymogen) form of matriptase or a two-chain (active) form of matriptase of a human than to a single-chain (zymogen) form of matriptase of said human.

17. (Canceled)

18. (Currently amended) The antibody ~~of Claim 14~~ or immunologically reactive fragment thereof of claim 16, wherein the antibody is a monoclonal antibody.

19. (Currently amended) The antibody or ~~immunogenic immunologically reactive~~ fragment thereof of ~~Claim 14~~ claim 15, wherein the ~~immunogenic immunologically reactive~~ fragment is selected from the group consisting of scFv, Fab, Fab', and F(ab')₂.

20-33. (Canceled)

34. (New) The antibody or immunologically reactive fragment thereof of claim 16, wherein the immunologically reactive fragment is selected from the group consisting of scFv, Fab, Fab', and F(ab')₂.

35. (New) The antibody or immunologically reactive fragment thereof of claim 16, wherein said single-chain form of matriptase comprises a polypeptide encoded by the nucleotide sequence of SEQ ID NO: 4, and the two-chain form of matriptase is produced by cleavage of said single-chain form of matriptase.

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36. (New) The antibody or immunologically reactive fragment thereof of claim 16, which binds to the two-chain (active) form of a matriptase protein that is present in a complex comprising a Kunitz-type serine protease inhibitor or a fragment thereof.